

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
7 August 2003 (07.08.2003)

PCT

(10) International Publication Number  
WO 03/064397 A1

(51) International Patent Classification<sup>7</sup>: C07D 231/56, 401/02, A61K 31/416, C07D 403/12, 405/12, 413/12, 409/12, 417/12, A61P 35/00

(74) Agent: ROBIDOUX, Andrea, L., C.; Vertex Pharmaceuticals Inc., 130 Wavery Street, Cambridge, MA 02139 (US).

(21) International Application Number: PCT/US03/02096

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

(22) International Filing Date: 23 January 2003 (23.01.2003)

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(26) Publication Language: English

(30) Priority Data:  
60/351,597 25 January 2002 (25.01.2002) US

(71) Applicant (for all designated States except US): VERTEX PHARMACEUTICALS INCORPORATED [US/US]; 130 Wavery Street, Cambridge, MA 02139 (US).

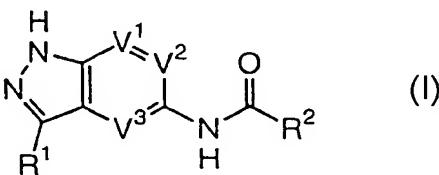
Published:  
— with international search report  
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(72) Inventors; and

(75) Inventors/Applicants (for US only): BINCH, Hayley [GB/GB]; 2 Orchard Way, Harwell, Oxon OX11 0LQ (GB). BRENCHLEY, Guy [GB/GB]; 12 Boucher Close, Grove Wantage, Oxon OX12 0NE (GB). GOLEC, Julian, M., C. [GB/GB]; 8 Manor Farm, Chapel Road, Ashbury, Swindon, Wiltshire SN6 8LS (GB). KNEGTEL, Ronald [NL/GB]; 92 Andersey Way, Abingdon, Oxon OX145 Northwest (GB). MORTIMORE, Michael [GB/GB]; Walrus House, 156 The Hill, Burford, Oxfordshire OX18 4QY (GB). PATEL, Sanjay [GB/GB]; 2 Alder Close, Abingdon, Oxon OX14 1YG (GB). RUTHERFORD, Alastair [GB/GB]; 11 Reade Avenue, Abingdon, Oxfordshire OX14 34E (GB).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: INDAZOLE COMPOUNDS USEFUL AS PROTEIN KINASE INHIBITORS



(57) Abstract: The present invention provides compounds of formula (I), or a pharmaceutically acceptable derivative thereof, wherein R<sup>1</sup>, R<sup>2</sup>, V<sup>1</sup>, V<sup>2</sup> and V<sup>3</sup> are as described in the specification. These compounds are inhibitors of protein kinase, particularly inhibitors of AKT, PKA, PDK1, p70S6K, or ROCK kinase, mammalian protein kinases involved in proliferative and neurodegenerative disorders. The invention also provides pharmaceutical compositions comprising the compounds of the invention and methods of utilizing those compositions in the treatment of various disorders.

WO 03/064397 A1